

## **REMARKS/ARGUMENTS**

The Applicant originally submitted Claims 1-23 in the application. The Applicant has amended Claims 4, 12 and 20 to correct informalities. No other claims have been canceled or added. Accordingly, Claims 1-23 are currently pending in the application.

### **I. Formal Matters and Objections**

The Examiner has objected to the drawings, the specification and Claims 4, 12 and 20. The Examiner has objected to the drawings for not including reference numbers that are mentioned in the specification. In response, the Applicant has amended the specification (paragraphs 39 and 59) to remove reference numbers "122" and "302" from the specification. Regarding reference number "235," the Applicant directs the Examiner to the PC control logic 230 of Figure 2. In the bottom left of the PC control logic 230 is the Fetch PC logic that is marked by reference number "235." Thus, the Applicant respectfully disagrees with the Examiner regarding the absence of reference number "235" in the drawings since it is illustrated in Figure 2. Accordingly, based on the above argument and the amendments, the Applicant respectfully requests the Examiner to withdraw the objection to the drawings.

Regarding the objections to the specification, the Applicant has amended paragraphs 43, 49, 57, 59 and 60 to correct the noted informalities. Additionally, addressing the objections Claims 4, 12 and 20, the Applicant has amended these Claims to correct those noted informalities. Accordingly, the Applicant respectfully requests the Examiner withdraw the objections to the specification and Claims 4, 12 and 20.

## **II. Rejection of Claims 1-23 under 35 U.S.C. §102**

The Examiner has rejected Claims 1-23 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,832,292 to Nguyen, *et al.* (Nguyen). The Applicant respectfully disagrees.

Nguyen is directed to the design of RISC type microprocessor architectures and, in particular, to a RISC microprocessor architecture that may be readily expanded for increased computational through-put. (*See* column 1, lines 61-64.) Nguyen teaches a microprocessor having an Instruction Fetch Unit (IFU) 102 that includes a Program Counter (PC) logic unit 270. (*See* column 6, lines 60-61, column 8, lines 42-43, column 12, lines 38-41, and Figures 1-3.) The PC logic unit 270 includes a prefetch PC control unit 364 and an execution PC control unit 366 that provides an address for prefetching. (*See* column 16, lines 43-46, column 17, lines 14-16 and Figure 3.)

The PC control unit 366, however, does not generate return PC values for call instructions in a pipeline of a processor as recited in independent Claims 1, 9 and 17. As defined in the specification, a return PC value equals a current value of the PC plus one. (*See* specification, paragraph 59.) The PC control unit 366, however, provides a current address (IF\_PC) as a return address to the prefetch PC control unit 364. (*See* column 17, lines 16-19 and lines 42-47.) Thus, Nguyen does not teach generating return PC values as defined in the specification and claimed since Nguyen teaches providing a current address as a return address.

Additionally, Nguyen does not teach storing return PC values or making ones of the return PC values available to a PC of a processor upon execution of corresponding return instructions as recited in independent Claims 1, 9 and 17. Instead, Nguyen teaches the prefetch PC control unit 364 stores the current address. Upon receipt of a return signal, the return address (the stored current address) is selected. (*See* column 17, lines 19-26.)

Thus, the cited reference Nguyen does not teach each and every element of independent Claims 1, 9 and 17 and Claims dependent thereon. Nguyen, therefore does not anticipate Claims 1-23. Accordingly, the Applicant respectfully requests the Examiner to withdraw the §102 rejection with respect to Claims 1-23 and allow issuance.

### **III. Comment on Cited References**

The Applicant reserves further review of the references cited but not relied upon if relied upon in the future.

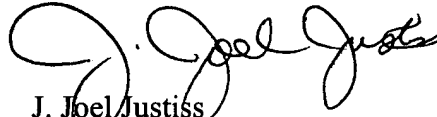
#### IV. Conclusion

In view of the foregoing amendment and remarks, the Applicant now sees all of the Claims currently pending in this application to be in condition for allowance and therefore earnestly solicits a Notice of Allowance for Claims 1-23.

The Applicant requests the Examiner to telephone the undersigned attorney of record at (972) 480-8800 if such would further or expedite the prosecution of the present application.

Respectfully submitted,

HITT GAINES, P.C.

  
J. Joel Justiss  
Registration No. 48,981

Dated: 9/30/04

P.O. Box 832570  
Richardson, Texas 75083  
(972) 480-8800